Saskatchewan Centennial 2005

100 YEARS OF HEART

2005-2006 PROVINCIAL BUDGET
PERFORMANCE PLAN

SASKATCHEWAN HIGHWAYS AND TRANSPORTATION

105-05092

Minister's Message

As Minister responsible for Saskatchewan Highways and Transportation, it is my pleasure to submit the performance plan for 2005-06 and beyond. This report outlines our plan for making progress on our long-term strategic outcomes in 2005-06. Many of the Department's initiatives for this upcoming year will facilitate safe and effective travel throughout the Province for our Centennial celebrations. I am committed to completing the key actions identified in our performance plan and reporting the Department's progress to the people of Saskatchewan in the 2005-06 Annual Report.

The plan endeavours to improve the sustainability of Saskatchewan's transportation system, further allowing for the safe movement of people and goods as it supports social and economic development. As well, we are progressing in our efforts to economically enable the Province. We continue to develop successful partnerships with our stakeholders to create and implement strategies to achieve the goals of our strategic plan. Safety and innovation remain key priorities for the Department. Targeted infrastructure investments and a responsive policy framework will ensure that the transportation system provides a solid foundation for economic and social growth.

Along with many infrastructure improvements, the Department will continue an enhanced tourism signing program, which began in 2004-05 in anticipation of the Province's Centennial celebrations, by providing cost-shared funding up to $100,000 with tourist operators for signs that promote provincially designated tourist facilities.

In 2005-06, a $300 million investment will allow the Department to continue the strategic plan and focus improvements in three major areas: safety through twinning Highway 16 from North Battleford to Lloydminster and Highway 1 between Regina and the Manitoba border and making improvements at the junction of Highways 11 and 312 near Rosthern; repaving provincial highways; and rebuilding rural highways. This year 57 km of twinned highway will be opened to traffic, 333 km of pavements will be resurfaced and 117 km of thin membrane surface (TMS) highways will be upgraded to a paved standard.

The 2005-06 Performance Plan establishes ambitious goals, which I believe will help transform the transportation system to meet government's vision of a safe, modern and efficient transportation system that supports economic growth and social well-being in our Province. I look forward to meeting these challenges in the upcoming year, as we work with our stakeholders to shape the transportation system for the future.

Maynard Sonntag

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Minister of Highways and Transportation

Who We Are

The mandate of the Department of Highways and Transportation is to optimize transportation's contribution to the social and economic development of Saskatchewan by operating, preserving and guiding the development of the provincial transportation system and enhancing provincial transportation system assets.

The provincially operated infrastructure includes 26 163 km of highways, 820 bridges, 354 large culverts, 18 airports in northern Saskatchewan, 12 ferries on the Saskatchewan River system and a barge on Wollaston Lake. The road network consists of 9 028 km of asphalt concrete pavements, 4 914 km of granular pavements, 6 530 km of thin membrane surface (TMS) highways, 5 560 km of gravel highways and 131 km of ice roads.

The Department continues to make significant progress in transforming TMS highways that are not capable of carrying any significant truck traffic, to granular pavements, which are able to accommodate heavy trucks. In 1995, the Province had 8 600 km of TMS highways and by the end of 2004 the length has been reduced by 2 070 km to 6 530 km, a 24 per cent reduction. The majority of the 2 070 km of TMS highways were converted to granular pavements.

The Department's activities can be grouped into four main areas focused on achieving our vision of transforming Saskatchewan's transportation systems to meet the social and economic opportunities of the 21st century:

- Operating the transportation system
- Preserving the transportation system
- Restoring and enhancing the transportation system
- Planning and developing transportation policy

OPERATING THE TRANSPORTATION SYSTEM

Operating the transportation system involves the delivery of a wide range of services to ensure the safe, orderly and efficient movement of people and goods. This includes pavement marking, signing, lighting, mowing, snow and ice control as well as ferry and airport operations. Related operational services such as property acquisition and management, traffic engineering, trucking programs as well as preservation and engineering services are also provided. It also includes enforcement of transportation legislation for the provincially owned infrastructure and provincially regulated short-line railways.

Operating the Province's highway network is facilitated by traffic counting and operational planning as well as developing and administering engineering standards and policies for road design, construction management, roadside development, access management, traffic guidance, road safety (e.g. speed limits) and utilization of aggregate resources. Professional and technical expertise is provided to rural municipalities regarding the municipal road network. The Department manages the Municipal Heavy Haul, Traffic Counting and Bridge Programs for Government Relations (GR).

As of October 1, 2004 the Department had 1,508 employees stationed in 105 Saskatchewan communities. Department crews complete most surface repair activities like crack filling, sealing and patching. They provide snow and ice control, pavement marking and gravel location services. Department crews repair and replace signs; operate the 12 Saskatchewan River ferries and most northern airports; and Department crews repair and replace most bridges.

The Department owns, operates and maintains its own maintenance equipment fleet. Book value of the Department's equipment fleet assets is about $49.9 million and the replacement cost is approximately $156 million.

PRESERVING THE TRANSPORTATION SYSTEM

Preserving the transportation system involves preventative maintenance and management of provincial highways, bridges, airports, and ferries to ensure a sustainable transportation system is available for the safe, orderly and efficient movement of people and goods. Paved, gravel and TMS highways are sustained through annual surface repair and preventative maintenance activities. Preventative maintenance and regular repair is also required to ensure bridges stay in service up to or beyond their design life.

The Strategic Partnership Program facilitates partnerships that support the strategic preservation and management of low traffic volume TMS highways through cost-effective, mutually beneficial agreements with municipalities and First Nations to provide acceptable levels of service for local residents.

RESTORING AND ENHANCING THE TRANSPORTATION SYSTEM

Restoring the transportation system ensures that the Province's existing highway and bridge assets are rehabilitated in a timely manner to protect the Province's investment in these key assets and ensure they are able to support the provincial economy. Enhancing the transportation system includes building new or upgrading existing provincial highway, bridge, or airport assets to meet the social and economic development opportunities of the future. The road building and heavy construction industry is contracted to build new or enhance highways, bridges and airports and resurface paved highways.

PLANNING AND DEVELOPMENT OF TRANSPORTATION POLICY

Saskatchewan's economy is dependent on trade, which requires a competitive and globally accessible transportation system. Developing transportation policy includes working with other jurisdictions, industry stakeholders and shippers to ensure that legislative and regulatory frameworks encourage efficiency and effectiveness throughout the system and among the transportation modes (road, rail, air and marine). This includes developing new methods and technology to improve the movement of goods by truck. Transportation planning includes working with stakeholders such as Area Transportation Planning Committees (ATPC) in the pursuit of defining system needs and strategically investing transportation resources towards garnering greater economic and social returns for communities throughout the Province.

Plan at a Glance

The performance plan identifies outcomes the Department is working towards in achieving its long-term vision of transforming Saskatchewan's transportation systems to meet the social and economic development opportunities of the 21st century. The plan builds on the Department's previous four performance plans and it reflects the strategic decisions that guide the future growth and development of Saskatchewan's transportation systems.

The Department completed a major review of its strategic management plan for the 2005-06 business development cycle. The process included an evaluation of the changes to the transportation system since 2000, an external environmental and internal scan, and an analysis of policy and program initiatives. Although no formal stakeholder consultations were conducted regarding the plan since 2002, through ongoing contact the Department met or communicated with many of its stakeholders to discuss specific issues and relay strategic direction for the Department during 2004-05. As a result of this process the Department confirmed the existing plan and the key elements of the plan remain unchanged for 2005-06.

The Department will continue to focus on sustaining Saskatchewan's transportation system to ensure it provides for the safe movement of people and goods as it supports economic and social development. Safety and innovation remain key Department priorities as does developing successful partnerships with a variety of stakeholders to create strategies for success. A responsive policy framework and targeted infrastructure investments will ensure the transportation network remains a solid foundation for economic and social growth.

The Department believes this plan provides the people of Saskatchewan with a clear direction for the transportation system of the future and enables the Department to demonstrate the progress being made in improving the transportation system.

Key initiatives for 2005-06 include:

- Resurface 269 km on the principal highway network and 64 km on the regional highway network.
- Invest $3.1 million for intersection improvements on Highway 11 near Rosthern.
- Begin grading new four lane section on Highway 11 from Warman to 9 km north.
- Through the federal-provincial Prairie Grain Roads Program contract for the completion of upgrading on 117 km of TMS highway to a paved standard.
- Complete resurfacing on 18 km, through the Border Infrastructure Fund, on Highway 39 from Roche Percee to Estevan.
- Deliver commitments on five construction partnership initiatives to improve 24 km of TMS highways.
- Through the Strategic Highway Infrastructure Program and Canada Strategic Infrastructure Fund cost share programs, invest $31.9 million to twin Highway 1 east and Highway 16 west by completing 40 km of grading, completing construction of two railway overpasses west of Broadview and opening 57 km of twinned highway.
- Deliver 57 km of road improvements under forestry commitments including Road Transportation Agreements with Weyerhaeuser at a cost of $5.3 million.
- Complete drainage improvements at the Stony Rapids Airport through the federal Airport Capital Assistance Program.
- Complete approximately 25 safety improvement projects through the Department's Safety Improvement Program.
- Implement remote vehicle inspection station technology in partnership with Transport Canada at three locations to monitor compliance levels in the forestry, agricultural and oil and gas industries.

Following is a summary of the Department's performance plan for 2005-06 and beyond. The plan is evolutionary and changes as the external environment changes. It is intended to be flexible and adaptive in nature. The goals and objectives articulate the outcomes the Department is pursuing in support of its vision. Those goals and objectives such as transforming and sustaining are long-term outcomes that will take several years to realize. The performance measures are key tools used to gauge progress towards achieving the objectives. The core principles within the plan are to operate and preserve the transportation system and along with enhancements, enable economic development. In July 2006, the Department will report on actual results compared to planned progress in the 2005-06 Annual Report.

OUR VISION – Transforming Saskatchewan's transportation systems to meet the social and economic opportunities of the 21st century

GOAL #1

A sustainable transportation infrastructure

OBJECTIVE 1 - *Preserved principal highway network to meet the future economic needs of the Province*

Performance Measures:

- Per cent of the principal highway network in "good" condition
- Amount of principal pavements beyond their service life

OBJECTIVE 2 - *Transformed regional transportation network to meet the future needs of rural Saskatchewan*

Performance Measures:

- Per cent of regional highway network in "good" condition by surface type: Pavement; Thin Membrane Surface (TMS); Gravel

OBJECTIVE 3 - *Reduced damage on the highway system caused by overweight vehicles*

Performance Measure:

- Per cent of overweight trucks on the highway system

OBJECTIVE 4 – *Increased funding from additional sources*

Performance Measures:

- Additional funding from non-provincial government sources
- Ratio of road operations to overhead

GOAL #2

The transportation system strengthens economic development and serves social needs

OBJECTIVE 1 – *Reduced cost of moving goods and people by road, rail and air*

Performance Measures:

- Value of economic development generated by the Department's trucking programs
- Per cent of principal highway network available at primary weights on an annual basis

OBJECTIVE 2 – *Targeted infrastructure investment for economic growth and social utility*

Performance Measure:

- Cumulative per cent of twinned highway opened to traffic

OBJECTIVE 3 – *Improved connections in the North*

Performance Measure:

- Cumulative per cent of improved northern community access roads

GOAL #3

Safe movement of people and goods

OBJECTIVE 1 – *Reduced collisions on the road*

Performance Measures:

- Per cent of collisions involving an injury or fatality
- Ratio of partnership trucking fleet collision rate compared to Canadian commercial trucking fleet collision rate
- Per cent of commercial vehicles inspected that are not mechanically fit and placed out of service
- Number of Commercial Vehicle Safety Alliance (CVSA) inspections conducted per year
- Per cent of provincial railway operators with approved safety management plans

OBJECTIVE 2 – *Increased workplace safety*

Performance Measure:

- Number and severity of at-work injuries

2005-06 Financial Overview

In 2005-06, the Province will invest $300 million on the provincial transportation system.

The Department's funding is reported in two separate votes. One vote provides for the overall operation and preservation of the provincial transportation system. Investment is focused on surface repair and preventative maintenance along with operational activities such as: snow and ice control, pavement marking, sign replacement, vehicle weight and dimension regulations enforcement, as well as ferry and airport operations. It also includes the amortization expenses for the Province's highway and bridge assets. The second vote provides for capital investment in the Province's infrastructure assets. This includes priorities like accelerated twinning of the National Highway System, resurfacing pavements and rebuilding rural TMS highways.

The distribution of Department spending by program area is shown below:

2005-06 OPERATING ESTIMATES	*(in thousands of dollars)*
Central Management and Services	$ 16,182
Preservation of Transportation System	80,131
Operation of Transportation Systemm	69,078
Transportation Policy	2,041
Custom Work Activity	–
Machinery and Equipment	7,500
Total Operations Appropriation	174,932
Less Transportation Equipment	(9,009)
Plus Amortization of Capital Assets	94,430
Total Operating Expense	$ 260,353
FTE Staff Complement	1,429.5
REVENUES*	$ 31,206

2005-06 CAPITAL ESTIMATES	*(in thousands of dollars)*
Infrastructure Rehabilitation	$ 43,481
Infrastructure Enhancement	81,617
Total Capital Appropriation	$ 125,098

2005-06 TOTAL APPROPRIATION	*(in thousands of dollars)*
Operations Appropriation	$ 174,932
Capital Appropriation	125,098
Total Appropriation	$ 300,030

There are three changes in the allocation of funding as compared with 2004-05 that are worth noting: increase in funding within the Department's Accommodations Services sub-program; consolidation of the Department's Administration and Accommodations and Central Services sub-votes; and elimination of the Department's Interdepartmental Services sub-vote.

The Administration sub-vote and the Accommodations and Central Services sub-vote have been combined for 2005-06 and are now reflected within the Central Management and Services sub-vote. Further, the increase to the Accommodations Services sub-program is mainly attributed to the inclusion of amortization and maintenance costs. This is a result of the conversion of Saskatchewan Property Management Corporation to a department.

The Interdepartmental Services sub-vote was previously established to reflect the provision and cost recovery of information technology services provided by the Department to Saskatchewan Agriculture, Food and Rural Revitalization, Saskatchewan Northern Affairs and the Information Technology Office. With the change in information technology services being provided by the Information Technology Office for 2005-06, the Interdepartmental Services sub-vote is no longer required. The elimination of the Interdepartmental Services sub-vote is a direct result of this change.

The Department administers the Area Transportation Planning (ATP) Support Program ($260,000) within its regional offices. The eleven Area Transportation Planning Committees throughout the Province are one of the Department's key stakeholders, and they represent local and area transportation needs and interests. The ATP Support Program is intended to provide funding for transportation studies and programs and the development of strategic plans.

**Note: 90 per cent of the Department's revenue comes from federal cost shared programs related to infrastructure development and improvement.*

Trends and Issues

With three per cent of Canada's population and 20 per cent of Canada's roads, Saskatchewan has more than twice as many roads per capita than any other province and nearly seven times the national average (Source: Transportation Association of Canada, Trans Statistics, 1995). This large number of roads, and a relatively small population, combined with federal policy changes that transferred an enormous amount of freight onto the roads from the rail system, has created challenges to our ability to sustain the provincial transportation system over the long-term. The Department's performance plan directly relates to addressing the following trends and issues.

INFRASTRUCTURE SUSTAINABILITY

The effective management of Saskatchewan's transportation infrastructure is critical to support economic development and growth. There are numerous pressures competing aggressively with transportation needs for public attention and an increased share of government revenues. New management models are integrating a strengthened customer focus, increased stakeholder influence, and collaborative regional planning to address increasing demands. Partnerships with local governments, area transportation planning committees, producers and industry are being developed to provide a safe, sustainable and efficient transportation system.

INCREASING TRUCK TRAFFIC

Truck traffic continues to increase on the highway system. For example, the value of exports transported by truck to the United States increased by nearly 230 per cent between 1990 and 1999 (Source: Canada Trade Analyzer, 1999). This trend has also been observed on major north-south and other east-west routes. Truck travel on Saskatchewan's National Highway System highways over the past ten years has increased by more than 47 per cent (Source: DHT Traffic Database, 2005). These trends are expected to continue with the growth of value added industries and the retail sector in Saskatchewan. Also, it is anticipated that total freight in Canada is expected to increase 1.3 per cent on an average annual basis between 1999 and 2015 with the greatest increase in the trucking sector (Source: TAF Consultants, 2002). Increased truck traffic is the result of a growing export based economy, but more truck loading accelerates the consumption of infrastructure assets and increases traffic congestion. Branch line abandonment and elevator consolidation have greatly influenced truck movements and the result is more grain transportation by truck on rural highways not designed to carry heavy truck traffic.

CHANGES IN TRADE FLOWS AND EXPANDING GLOBALIZATION

Growth in trade with China, other Pacific Rim markets, and the U.S. has significantly increased container movements. This has created competing demands from bulk exports and containerized imports to access existing infrastructure capacity, which has resulted in congestion at port terminals. For example, between 1995 and 2005, Saskatchewan exports to the U.S. have nearly doubled (Source: Industry Canada). Saskatchewan shippers and carriers face the competitive challenges associated with access to expanded international markets and integrating with the North American supply chain. Given the significance of north-south trade to Saskatchewan, ensuring access to the National Highway System, developing Saskatchewan's key commercial routes and improving trade corridor links are becoming the focus of Saskatchewan's transportation investment policy. There is significant pressure on the Province's infrastructure to promote a seamless link with North American trading partners. There is a growing emphasis on supply chain productivity, freight efficiency, inter-jurisdictional harmonization and standardization to facilitate the movement of people and goods across international boundaries.

ECONOMIC DIVERSIFICATION

The oil and gas, forestry, mining, and tourism sectors are also growing and supporting the provincial economy. Economic diversification in the mining, forestry and oil sectors often occurs where the highway network is not capable of carrying the increased truck traffic. The additional traffic and changing traffic patterns creates specialized carrier requirements, places new pressures on existing road infrastructure and generates new transportation infrastructure demands.

INCREASING IMPORTANCE OF RAIL TRANSPORTATION

The value of rail shipments accounts for more than 52 per cent of Saskatchewan's total primary and manufacturing output, a significantly higher percentage than in the other prairie provinces (Source: Discussion Paper for the Task Force on the Commercialization of CN, 1994). Saskatchewan must develop proactive transportation policies that increase the efficiency of freight movements on the provincial highway and rail systems to offset the disadvantages of being located far from major markets. Co-ordinating the development of road, rail, and intermodal systems is necessary to optimize efficiency. Initiatives that reduce shippers' transportation costs are critical for maintaining the competitiveness of Saskatchewan industries.

AIR SERVICES

Demands for Department support associated with air infrastructure continue to increase, especially with the deregulation of the air industry in the early 1990's. In addition to Saskatoon and Regina, there are another 146 airports located throughout the Province. Northern air operations, maintained by the department, provide key services for First Nations and Métis

communities, northern economic development and other industries. Many of these airports service small communities that rely on air transportation for emergency medivac, tourism, recreation, and other services. At this time the majority of the southern airports are deteriorating and living off current assets with very little resources to undertake rehabilitation or minor capital improvements.

ACCESS TO ABORIGINAL COMMUNITIES

Lack of transportation infrastructure limits social and economic development opportunities for First Nations and Métis. Upgrading access roads to link northern and southern rural aboriginal communities to the transportation system is essential. Infrastructure improvements will lead to inclusion and prosperity for First Nations and Métis communities. Transportation infrastructure improvements provide access to education, medical services, and retail trading centres, while generating employment opportunities.

EXTENDING PRIMARY WEIGHTS

Increased globalization and the importance of Saskatchewan businesses' ability to compete in global markets have resulted in increasing demands for primary weights. The Department is reviewing the provincial weight management system including access to primary weights. The review of the primary weight system will establish a more rational and transparent weight management system and will identify opportunities for system expansion which will benefit Saskatchewan businesses. Because the impact of extending the primary weight system is significant, it must be quantified to ensure that the benefits of allowing heavier loads exceed incremental road costs.

SAFETY

Meeting Saskatchewan's road safety goals will continue to be a challenge given the combination of external factors like aging drivers, distracting in-vehicle technology and impaired driving. Increased diligence is also required to ensure the safety of the public and workers in work zones and on construction sites. A significant change in driver behaviour is required to realize major improvements in road safety.

ENVIRONMENTAL SUSTAINABILITY

There is an increased awareness of environmentally sustainable transportation, which addresses energy consumption, engine emissions, noise, habitat preservation and species protection. There is more focus on mitigating the environmental impacts of infrastructure development.

HUMAN RESOURCES

Labour and skill shortages in Saskatchewan's transportation sectors are likely to broaden and intensify as the workforce ages. There already exists a shortage of commercial drivers and an emerging shortage of transportation knowledge workers. New employment will broaden the mix of professional disciplines fostering increased diversity, providing opportunities for youth, developing leadership skills, attracting and retaining specialized expertise and managing organizational succession. The Province has a tremendous opportunity to access the growing First Nations and Métis labour markets that are critical for addressing skills gaps and filling labour shortages.

Changes from 2004-05 Performance Plan

The Department has recently formalized the size of the principal network at 5 000 km, which resulted in moving 2 000 km of road previously considered as part of the principal system into the regional system. This change was made to better target sustainability and level of service and impacts the comparability of previously reported data for the following performance measures:

- Per cent of principal highway network in "good" condition
- Amount of principal pavements beyond their service life
- Per cent of regional highway network in "good" condition by surface type: Pavement; Thin Membrane Surface (TMS); Gravel

The starting point data for these measures has been prepared based on the revised size of the principal network.

Goals, Objectives, Actions and Measures

This section contains the detailed 2005-06 Performance Plan for the Department of Highways and Transportation, which supports advancement towards our vision of transforming Saskatchewan's transportation systems to meet the social and economic opportunities of the 21st century. Under each goal a number of objectives have been established that support progress towards the broader goal statement. For each objective, a set of key actions that will be completed in 2005-06 has been identified. These actions are the means for making progress on the objectives. In addition, performance measures have been established for each objective that will gauge progress towards meeting the objective.

The Department's operations are directly impacted by inflationary pressures, including the price of oil and other material costs, and the variability in summer and winter weather throughout the Province. For example, the price of crude oil has a significant impact on the cost of diesel fuel and asphalt products (penetration asphalt cement, emulsions and cutback asphalt). The fluctuations in these prices can have a dramatic impact on the Department's ability to sustain current levels of road construction and preservation work from year to year. By the fall of 2004, average monthly oil prices rose to $41/barrel (source: US Federal Reserve Bank website). This represents an increase of 115 per cent since April 1999. The roadwork planned for 2005-06 is based on an assumed stable price for materials.

Weather has a direct impact on the amount of summer capital and preservation work that can be completed before freeze-up. A dry summer means that grading and resurfacing projects can proceed on schedule. However, a late spring and early fall can shorten the construction season substantially delaying project completion until the following year. Winter snow and ice storms also play a significant role in driving operational costs for the Department. Ice storms cost three times more than snow storms. The past two winters have been particularly costly as a result of the unusual number of ice events throughout the Province. Therefore, large material price increases and weather can impact the amount of roadwork accomplished and can impact performance measure results.

GOAL#1

A sustainable transportation infrastructure

***OBJECTIVE 1** – Preserved principal highway network to meet the future economic needs of the Province*

Fundamental to a sustainable transportation infrastructure is the recognition of a changing Saskatchewan economy and landscape. Increasing north-south trade, developing trade corridors, economic diversification and increased truck haul are affecting the way the principal highway system is being used today and will be used in the future.

Preserving and improving the principal highway network to handle anticipated traffic levels will allow the provincial transportation system to meet future economic needs.

Key Actions for 2005-06

- Invest $3.1 million for intersection improvements on Highway 11 near Rosthern.
- Strengthen five drainage structures on the principal highway network.
- Resurface 269 km on the principal highway network.
- Pursue partnership opportunities with municipalities and private individuals to operate current rest stops.
- Replace/repair 33 bridges/drainage structures on the principal highway network.
- Inspect and rate 53 major bridges and 66 minor bridges on the principal highway system.

What are we measuring?	Where are we starting from?
Per cent of principal highway network in "good" condition	77% *[February 28, 2005]*

This provides an indication of how the Department is managing the principal highway network by measuring surface conditions, which provide a surrogate measure of how the road user perceives highway conditions.

To determine if a pavement is in "good" condition, the Department uses a combined measurement of the road's rutting and ride. To measure ride quality, a device is used that generates a measurement of smoothness based on an international standard called the International Roughness Index (IRI).

To evaluate rutting, a device that continually measures rut depth is used. The measurements are analyzed using the processes and definitions in the Department's Asset Management System. A road must have good rutting and good/fair ride to qualify as being in good condition. The road user would experience a smooth, comfortable ride with minimal ponded water in the wheel paths.

Factors like contractor progress, fluctuating input costs and the length of the construction season are outside of the Department's control but influence the results of this measure.

What are we measuring?	Where are we starting from?
Amount of principal pavements beyond their service life	2 649 km-years *[February 28, 2005]*

Based on their original engineering standards and a regular maintenance program, pavements have a certain useful life expectancy – their service life. Decreasing the amount of principal pavements beyond their service life will demonstrate progress in reducing the risk of pavement failure on the principal highway system.

The length of each road segment that is beyond its service life is measured in kilometres and then multiplied by the number of years that it is beyond its service life, to provide a measurement in km-years. This measure provides an overall picture of the extent to which the service life is being exceeded on the principal system. It is important to note that the decision to resurface a highway is driven by surface condition not pavement age. In an ideal world there would be no pavements beyond their service life. However, prudent infrastructure management means that there will always be some pavements beyond their service life if material characteristics, environmental conditions and traffic patterns allow a pavement to perform better than expected.

Factors like contractor progress, fluctuating input costs and the length of the construction season are outside of the Department's control but influence the results of this measure.

OBJECTIVE 2 *– Transformed regional transportation network to meet the future needs of rural Saskatchewan*

The regional transportation network provides local access and collects traffic for the principal network. Changing traffic patterns caused by such trends as rural depopulation, grain elevator closures, branch line abandonment and increased truck haul are affecting the way the regional transportation system is being used today and will be used in the future.

To be sustainable in the long-term, the regional network needs to be transformed to reflect a balance between road standards in the network, maintaining the roads in good condition and available funding levels.

Key Actions for 2005-06

- Replace 22 bridges/drainage structures on the regional highway network.
- Inspect and rate 37 major bridges and 264 minor bridges on the regional highway system.
- Replace the ferry towers at the Paynton, Wingard, and Estuary ferry crossings.
- Repair 60 drainage structures on the regional highway network.
- Through the federal-provincial Prairie Grain Roads Program (PGRP) contract for the completion of upgrading on 117 km to a paved standard.

- Continue implementation of the DHT partnership agreement with Pavement Scientific International (PSI) to reconstruct 100 km of TMS highways using "Made in Saskatchewan" road strengthening technology.
- Deliver commitments on five construction partnership initiatives to improve 24 km of TMS highways.
- Resurface 64 km on the regional highway network.

What are we measuring?

Per cent of regional highway network in "good" condition by surface type: Pavement; Thin Membrane Surface (TMS); Gravel

Where are we starting from?

Pavement: 74%

TMS: 23%

Gravel: 60%

[February 28, 2005]

This provides an indication of how the Department is managing the regional highway network by measuring surface conditions, which provide a surrogate measure of how the road user perceives highway conditions.

The regional transportation network is made up of pavement (asphalt concrete or AC and granular), TMS and gravel roads. The methodology to determine the road quality differs depending on the type of surface:

Pavement: To determine if a pavement is in "good" condition, the Department uses a combined measurement of the road's rutting and ride. To measure ride quality, a device is used that generates a measurement of smoothness based on the IRI. To evaluate rutting, a device that continuously measures rut depth is used. The measurements are analyzed using the processes and definitions of the Department's Asset Management System. A road must have both good rutting and good/fair ride to qualify as being in good condition. The road user would experience a smooth, comfortable ride with minimal ponded water in the wheel paths.

Thin Membrane Surface (TMS): To determine if a TMS is in "good" condition, the Department uses a measure of the road's ride. To measure ride quality, a device is used that generates a measurement of smoothness based on IRI.

Gravel: The Department's Asset Management System condition ratings for stability (strength of road bed) and protruding rock (amount of large rocks protruding from the roadbed) are used to measure "good". The Asset Management System definitions for "good" in each of these field measurements are used. In order to be a "good" gravel road it must have a "good" rating in both measurements. The road user would drive on a hard gravel road surface with few rocks protruding from the roadbed.

Factors like contractor progress, fluctuating input costs and the length of the construction season are outside of the Department's control but influence the results of this measure.

OBJECTIVE 3 *– Reduced damage on the highway system caused by overweight vehicles*

The combination of grain elevator closures, rail line abandonment and increased trade with the United States continues to increase truck volumes on Saskatchewan roads. The trend of increased truck weights and dimensions to larger, more cost-effective configurations is adding pressure to our highways.

Changes in Saskatchewan's commercial trucking profile have long-term implications for the principal highway system. These major routes are designed to accommodate significant volumes of heavily loaded trucks. However, they are deteriorating faster due to the increased tonnage.

On the Province's regional highway network, increased truck traffic has had a devastating affect. Many of the Province's regional roads are TMS construction, and were not designed to accommodate high volumes of heavily loaded trucks. Reducing the number of overweight vehicles will decrease road damage and help the Department sustain the road network.

The main method to reduce the number of overweight vehicles is to increase compliance with provincial vehicle weight and dimension regulations by enhanced weight enforcement activities.

Key Actions for 2005-06

- Through a partnership with International Road Dynamics, The University of Saskatchewan, Constance Consulting and Transport Canada develop the remote operation of weigh scales to increase the monitoring of commercial vehicle operations.
- Develop three Remote Vehicle Weigh Stations in partnership with Transport Canada at Weyburn, Carlyle and Prince Albert to monitor the level of compliance at strategic locations on the network and to identify non-compliant carriers to target weight audits.
- Prepare a communications strategy to enhance compliance activities with the shipping and carrier communities.
- Implement weight enforcement focused blitzes on regional highways in areas with significant truck traffic.
- Monitor consignor and/or consignor agents accused of forcing carriers to operate overweight.

What are we measuring?	**Where are we starting from?**
Per cent of overweight trucks on the highway system	10.0% *[October 31, 2004]*

Truck traffic continues to increase on the highway system. A certain percentage of these trucks will be overweight and cause more damage to the highway system. This performance measure monitors the effectiveness of the Department's policies and enforcement actions in reducing the number of overweight vehicles.

A random sampling process is used to monitor the per cent of overweight vehicles. While this does not provide a statistically valid representation of the entire Province, it will allow progress to be monitored in a cost effective manner.

The Department has a high level of influence over this performance measure. Increasing transport compliance resources combined with shipper liability legislation allows the Department to increase its weight compliance activities. An increased weight compliance presence on the provincial highway system should decrease the amount of overweight vehicles in the long-term because there is a higher chance overweight carriers will be caught. However, in the short-term, a greater enforcement presence could also produce a higher than targeted result in this measure due to more enforcement.

***OBJECTIVE 4** – Increased funding from additional sources*

To achieve long-term sustainability, additional funding is required to close the gap between transportation system needs and available resources. Saskatchewan recognizes the importance of a National Highway System that provides for efficient inter-provincial and international movement of commodities and supports Canada's economic growth, social development and national unity.

While road transportation has been a provincial responsibility, the Province feels the federal government has an obligation to participate in the costs of preserving and upgrading the National Highway System. Increasing the funding levels from the federal government and industry partners will help achieve long-term transportation system sustainability.

Key Actions for 2005-06

- Promote the Transportation Partnership Program with those companies that would substantially benefit from participation in the program.
- Continue cost sharing with the Federal Government on the Prairie Grain Roads Program (PGRP), Strategic Highway Infrastructure Program (SHIP), Canada Strategic Infrastructure Fund (CSIF), and Border Infrastructure Fund (BIF) to upgrade rural highways, accelerate twinning on Highways 1 and 16, and provide secure flow of goods and people with our United States trade partner.
- Complete $1.2 million of road improvements through industry partnerships.
- Fund $1.6 million of highway and/or safety improvements through funds deposited into the Transportation Partnerships Fund (TPF).

What are we measuring?	Where are we starting from?
Additional funding from non-provincial government sources	$34.8 million *[February 28, 2005]*

The amount of additional funding obtained from non-provincial sources is an indicator of the Department's success in pursuing funding from non-traditional or non-provincial government sources.

Non-provincial government funding comes from various sources including:

- Industry Partnerships
- Transportation Partnership Fund
- Federal Government:
  - ~ Airport Capital Assistance Program
  - ~ Border Infrastructure Fund
  - ~ Canada Strategic Infrastructure Fund
  - ~ Prairie Grain Roads Program
  - ~ Strategic Highway Infrastructure Program
  - ~ National Safety Code
  - ~ Transport Canada - Intelligent Transportations Systems Plan (ITS)

The Department is able to influence the level of non-provincial funding by actively pursuing federal infrastructure funding programs and through development and management of initiatives like the TPF.

What are we measuring?	Where are we starting from?
Ratio of road operations to overhead	$7.40 of on-road spending for every $1.00 of overhead spending *[March 31, 2004; latest data available]*

The ratio of road operations to overhead is an indicator of our success in creating internal efficiencies. Better internal efficiency ensures that the highest possible percentage of funding, including any increased funding from additional sources, goes directly to construction and preservation on the transportation system. Between 2001 and 2004 cumulative savings from the Department's administrative offsets and reductions exceeds $21 million. These savings have been redirected to "on road" expenditures.

The Department has influence over this performance measure because it is responsible to manage its administration and overhead costs relative to the entire budget.

GOAL #2

The transportation system strengthens economic development and serves social needs

OBJECTIVE 1 *– Reduced cost of moving goods and people by road, rail and air*

Efficient transportation systems are needed to provide competitive transportation options for Saskatchewan producers and shippers and to provide adequate mobility for travelers. Providing an efficient transportation system will contribute to reducing the cost of moving goods and people.

The Department continues to examine the possibility of additional performance measures for this objective. Since the objective's intent relates to efficiency gains for various transportation modes including road, rail and air, it is important to have indicators that show progress towards a competitive environment for the Province's industries, producers and shippers. However, these measures are more difficult to develop and the Department will only have a level of influence on the results rather than direct control.

Key Actions for 2005-06

- Provide advice and develop positions that represent Saskatchewan transportation interests at federal/provincial transportation forums and interdepartmental committees.
- The Department intends to establish a Memorandum of Understanding with Saskatchewan Government Insurance which will outline the steps towards achieving the goals set out in Transport Canada's Road Safety Vision 2010.
- Work with industry to develop safer, road friendly and more efficient new generation trucks to increase revenue through the Transportation Partnerships Program (TPP) for road system improvements.
- Enhance economic development of the Province by generating $1 million in freight cost savings for partner trucking companies over three years through negotiating new trucking agreements.

What are we measuring?	**Where are we starting from?**
Value of economic development generated by the Department's trucking programs	$68.0 million (cumulative) *[2000-2003; latest data available]*

This measure gauges the benefit to the provincial economy of trucking partnership agreements that increase transportation efficiency for carriers and shippers participating in the TPP. Increased efficiency reduces trucking costs and makes Saskatchewan companies more competitive in the global marketplace.

The measure quantifies the savings in freight costs for partners in the trucking programs, which reduces their input costs and allows them to be more competitive. The baseline and methodology for this measure were documented in a July 2000 study of the TPP.

The Department influences this performance measure because it develops the weight regime and policy framework for the TPP. If the policy framework is compatible with the needs of Saskatchewan shippers and carriers, more trucking partnerships can be developed increasing the amount of savings for our partners.

Economic development generated by the trucking program began in 2000 and was on a three year cycle of assessment. The program committed $5 million over three years as freight cost savings for trucking companies. However, the calculation methodology related to this measure is currently under review. Results of this review and any resulting re-statement of performance data will be reflected in the 2005-06 Annual Report.

What are we measuring?	**Where are we starting from?**
Per cent of principal highway network available at primary weights on an annual basis	95.9% (based on 7 000 km principal system) *[October 31, 2004]*

Primary weights are the vehicle weights allowed on principal highways. The allowable vehicle weight is based on the structural capacity of the highway. Increasing the length and time that the principal highway network is available at primary weights increases the efficiency and productivity of all freight moved on the principal system.

A policy change in November 2002 eliminated the 10-month primary weight restriction. These highways are now available at primary weight all year round, increasing transportation efficiency for Saskatchewan carriers and shippers.

The Department can influence this performance measure by changing policy and regulations that govern the weight regime on the provincial highway system or increasing a road's structural capacity. Extending the primary weight system increases transportation efficiency, but also accelerates infrastructure consumption. A balance is required to ensure the transportation network is sustainable and provides efficiency.

***OBJECTIVE 2** – Targeted infrastructure investment for economic growth and social utility*

Transportation infrastructure investment needs to be strategically targeted to ensure it maximizes the contribution to the Province's overall economic and social well-being. The Department continues to focus on developing strategic corridors that will support current and future traffic patterns.

Key Actions for 2005-06

- Complete road improvements in Buffalo Pound and Douglas Provincial Parks and Elbow Harbour Recreation Site.
- Through SHIP and CSIF cost share programs invest $31.9 million to twin Highway 1 east and Highway 16 west by completing 40 km of grading, completing construction of two railway overpasses west of Broadview and opening 57 km of twinned highway.
- Deliver 57 km of road improvements under Roads Transportation Agreements with Weyerhaeuser.
- Complete upgrading five TMS corridors to a paved standard.
- Continue an enhanced Centennial tourism signing program, providing cost-shared funding up to $100,000 with tourist operators for signs that promote provincially designated tourist facilities.
- $25,000 will be provided for placing Centennial celebration logo tabs at seven major border crossings and at major capital projects.

What are we measuring?	**Where are we starting from?**
Cumulative per cent of twinned highway open to traffic	Highway 1, east: 43% Highway 1, west: 100% Highway 16, west: 30% *[October 31, 2004]*

Measuring the cumulative percentage of twinned highway opened to traffic is an indicator of progress in delivering our twinning commitments. When a portion of twinning for a corridor opens to traffic, it contributes to the cumulative percentage opened for that corridor. When the twinning of a corridor is completed, its cumulative percentage opened to traffic is 100 per cent.

In 1997, the Province committed to complete twinning the Trans-Canada and Highway 16 between North Battleford and Lloydminster on these specific timelines:

- Highway 1 west (108 km): Complete in the year 2008
- Highway 16 west (103 km): Complete in the year 2010
- Highway 1 east (168 km): Complete in the year 2012

In 2001-02, the Province committed to accelerate twinning Highway 1 west so it would be completed in 2004. On March 5, 2003 the Province and federal government announced a funding partnership that would complete twinning as follows:

- Highway 1 west in 2003 (now completed)
- Highway 16 between North Battleford and Lloydminster in 2007
- Highway 1 east in 2007

The Department has a high level of influence over this performance measure because it is responsible to develop a schedule, which will complete the twinning within the identified time frame.

***OBJECTIVE 3** – Improved connections in the North*

Unlike southern Saskatchewan, there is generally only one route to connect northern communities and provide access to health, education and social services. Providing basic mobility in remote northern areas is critical to supporting northern social and economic development.

The Department is working to enhance the mobility of northern residents by improving northern community access roads. The Department is also committed to increase the capacity of northern residents to participate in the delivery of transportation services.

Key Actions for 2005-06

- Invest over $25 million to preserve, operate and improve provincial highways, bridges and airports in Northern Saskatchewan.
- Complete 700 hectares of brush clearing on northern highways.
- Complete 1 000 km of dust treatment on northern highways.
- Operate and maintain northern seasonal roads, including: 283 km of seasonal road and 131 km of ice roads in northern Saskatchewan.
- Continue upgrading 13 km of access roads to communities in northern Saskatchewan (Pelican Narrows, Dillon, and Lake Athabasca communities).
- Operate and maintain 18 northern airports and the Wollaston Barge.
- Complete 30 km of highway improvements in the Northern Administrative District.

What are we measuring?	**Where are we starting from?**
Cumulative per cent of improved northern community access roads	63.6% *[October 31, 2004]*

Improving connections in the North serves a dual purpose of strengthening provincial economic development and better serving the social transportation needs of northern residents. The Department wants to determine its effectiveness in achieving success on both of these fronts.

A Northern Community Access Road is defined as any road that provides access to a northern community, regardless of the road's length. Improvements include roads that are rehabilitated or upgraded. As of 2001, the Department had identified 1 130 km of provincial highways in northern Saskatchewan as Northern Community Access Roads.

The Department has a high level of influence over this performance measure because it is responsible to develop a capital investment program that supports its goals and objectives within the overall budget level.

GOAL #3

Safe movement of people and goods

OBJECTIVE 1– *Reduced collisions on the road*

Safe movement of people and goods is a fundamental expectation of transportation system users. It is also a continual focus of the Department in its design, operation, construction and maintenance activities. Through this focus on safety, the Department strives to contribute to reducing the number and severity of collisions on the road.

Key Actions for 2005-06

- Improve safety of provincial railway operations to protect the public and railway employees by collecting and approving railway safety management plans.
- Complete 20 478 km of centreline marking and 24 738 km of edgeline marking on the surfaced system.
- Replace 700 single post signs and 500 double post signs.
- Complete approximately 25 safety improvement projects through the Department's Safety Improvement Program.
- Tender 35,400 hectares of mowing at a total estimated cost of $1.08 million to control vegetation on side slopes for optimum snow and ice control.
- Provide public access to highway hotline road information systems through toll free telephone service and the Internet.
- Implement the Saskatchewan Highways and Transportation Road Salt Management Plan including a training program for the environmental management of road salt usage.
- Conduct 9 500 truck safety inspections at roadside, permanent scales and major check stops.
- Participate in the annual international safety inspection event named Roadcheck and conduct industry training seminars on Commercial Vehicle Safety Alliance (CVSA) inspection standards to help carriers pass CVSA inspections and reduce out of service rates.
- Participate in the Operation Air Brake campaign as part of an international effort to reduce brake defects in commercial vehicles.

What are we measuring?	Where are we starting from?
Per cent of collisions involving an injury or fatality	36% *[March 31, 2004]*

This measure gauges the effectiveness of infrastructure at reducing the severity of collisions by considering the percentage of total collisions that result in an injury or fatality.

The Department has very little influence over the total number of collisions. There are a number of variables that affect the number and/or severity of collisions on the highway system including: driver behaviour, environmental conditions, enforcement campaigns, education campaigns, legislation changes, safety improvements made to vehicles and the average age of drivers. In fact, 70 per cent of all collisions can be attributed to driver error.

The Department can complete safety improvements like twinning, intersection improvements, guard rails installations, side slopes flattening, rumble strip installations and improved signage, which makes the infrastructure more forgiving in the event of a collision. These improvements may lessen the severity of the collision but not necessarily prevent them from occurring.

What are we measuring?	Where are we starting from?
Ratio of partnership trucking fleet collision rate compared to Canadian commercial trucking fleet collision rate	5.07 collisions in overall Canadian commercial fleet for every 1 collision in Trucking Partnership Program fleet *[2002-03; latest data available]*

This measures how much safer trucks that take part in the Department's TPP are relative to the regular Canadian commercial fleet. Trucks operating under partnership agreements have higher operating standards and requirements than the average truck on the highway system. This measure assists in monitoring the effectiveness of the TPP standards in promoting truck safety, and reducing collisions, while increasing transportation efficiency. The Department, however, continues to face challenges in obtaining recent data to calculate this ratio.

The Department cannot influence the Canadian commercial trucking collision rate. However, it develops the standards and policies required for vehicles and operators involved in the TPP. The Department monitors and enforces these policies and standards to ensure compliance in the TPP focuses on commercial vehicle safety and operator competence allowing their trucks to operate as safely as possible.

What are we measuring?	Where are we starting from?
Per cent of commercial vehicles inspected that are not mechanically fit and placed out of service	16% *[October 31, 2004]*

This measure provides an indication of the success of the Department's safety communications messaging and enforcement efforts by monitoring the change in commercial vehicle safety rates.

It measures the amount of commercial vehicles that are not mechanically fit, which are still operating on the highway system.

The Department has some influence over this performance measure. Increasing transport compliance resources and focusing efforts on commercial vehicle safety inspections and communication in conjunction with weight compliance activities increases the importance and profile of commercial vehicle safety for Saskatchewan carriers. This should help reduce the number of unsafe trucks on the provincial highway system.

What are we measuring?	Where are we starting from?
Number of Commercial Vehicle Safety Alliance (CVSA) inspections conducted per year	7,239 *[October 31, 2004]*

This measure monitors the number of CVSA inspections completed by the Transport Compliance Branch throughout the year and is used in conjunction with the previous measure to determine the effort placed into enforcing commercial truck safety.

The Department has a high level of influence over the measurement results because it provides the direction and necessary resources for Transport Compliance officers to conduct CVSA inspections, which help improve commercial truck safety on the provincial highway system. In the past, the federal government provided resources under the National Safety Code, which allowed additional CVSA inspections to be completed. However the Department is committed to maintaining our progress on this measure nonetheless.

What are we measuring?	Where are we starting from?
Per cent of provincial railway operators with approved safety management plans	7.7% *[March 31, 2004]*

This measure gauges the Province's ability to ensure provincial railways have developed procedures, which support safe railway operation. The Department has a high level of influence over this measure because *The Railway Act* requires provincial railway operators to provide the Department with a safety management plan and the Department has the authority to approve the plan.

***OBJECTIVE 2** – Increased workplace safety*

Many of the Department's activities take place in a high risk environment as employees work near high-speed vehicles, around heavy equipment or in an industrial construction setting. The safety of employees and contractors is of critical importance to the Department. Through various policies and programs, the Department strives to provide a work environment that is free from harassment and discrimination, meets the physical needs of employees, provides a sense of safety and security and promotes a healthy attitude.

Key Actions for 2005-06

- Continue improving and delivering employee safety training including safe operating practices, equipment training, hazardous materials, Workplace Hazardous Materials Information System, occupational health and safety and marine emergency duties.
- Perform 30 work zone and 20 highway construction audits.
- Attend trade shows to promote safety awareness in the Orange Zone and Snow Zone.

What are we measuring?	**Where are we starting from?**
Number and severity of at-work injuries	Medical aid accidents: 37 Lost time accidents: 27 *[October 31, 2004]*

The number and severity of at-work injuries is an indicator of the effectiveness of safety programs and the overall level of safety in the workplace. Workplace accidents are separated into two categories: Medical aid accidents and lost-time accidents.

Medical aid accidents are those accidents in which the employee required medical aid after the accident, but did not require time off work to recover from the accident. Lost-time accidents are those accidents in which the employee required time off to recover from the accident.

Department safety programs and policies influence the number of accidents. However, there will be significant annual variations. Accident reporting may increase as employees become more aware of safety policies and programs.

For More Information

The Department is confident that this report provides useful information about its future plans. If you have any questions or comments, or would like additional copies of the 2005-06 Performance Plan, we invite you to call 787-4804, or contact:

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Or send us an e-mail through the Saskatchewan Highways and Transportation website:
http://www.highways.gov.sk.ca/

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